

Amendment to the Claims:

Claims 1-2 (Cancelled).

3. (Currently Amended) In a multiple move, processor based simulated annealing method for resolving a scheduling problem associated with a plurality of orders for train resources, each order having a cost function and a scheduling window associated therewith, the improvement comprising the steps of:

- (a) establishing plural criteria for acceptance of a solution;
 - (b) classifying the scheduling problem; and
 - (c) selecting the criteria for acceptance of a solution as a function of the classification of the scheduling problem
- wherein the step of classifying includes the steps of:

- (i) determining the total trip time associated with the plurality of orders;
- (ii) determining the total slack time associated with the plurality of orders;
- (iii) determining the classification of the problem as a function of the total trip time and the slack time

~~The method of Claim 2~~ wherein the step of determining the classification is determined by the steps of:

- (a) selecting a predetermined percentage of total trip time to provide a threshold value; and
- (b) comparing slack time with the threshold value.

4. (Original) The method of Claim 3 wherein the selected percentage is less than about one hundred percent.

5. (Original) The method of Claim 3 wherein the selected percentage is more than about one hundred fifty percent.

6. (Cancelled).

7. (Currently Amended) In a multiple move, processor based simulated annealing method for resolving a scheduling problem associated with a plurality of orders for train resources, each order having a cost function and a scheduling window associated therewith, the improvement comprising the steps of:

(a) establishing plural criteria for acceptance of a solution;

(b) classifying the scheduling problem; and

(c) selecting the criteria for acceptance of a solution as a function of the classification of the scheduling problem

wherein the step of classifying includes the steps of:

(i) determining the total trip time associated with the plurality of orders;

(ii) determining the resource exception associated with the plurality of orders;

(iii) determining the classification of the problem as a function of the total trip time and the resource exception

~~The method of Claim 6~~ wherein the step of determining the classification is determined by the steps of:

(a) selecting a predetermined percentage of total trip time to provide a threshold value; and

(b) comparing resource exception with the threshold value.

Claims 8-13 (Cancelled).

14. (Currently Amended) The method of Claim [[13]] 16 wherein the step of determining the scaling parameter by the steps of:

(i) determining a normalizing component of the scaling parameter as a function of the change in resource exception and cost from previous moves;

(ii) determining a target resource exception as a function of the number of previous moves; and

(iii) determining a biasing component of the scaling parameter as a function of a comparison of the resource exception of the current move to the target resource exception.

15. (Cancelled).

16. (Currently Amended) A method for resolving a scheduling problem associated with a plurality of orders for train resources by evaluating available moves in a computer based simulated annealing process, each move resulting in a change in the resource exception associated with the problem and a change in cost associated with the move, comprising the steps of:

(a) classifying the scheduling problem;

(b) making a random move;

(c) weighting the resource exception and cost factors associated with the random move with a scaling parameter related to the classification of the problem;

(d) evaluating the resource exception and the cost of the solution against a predetermined criteria; and

(e) accepting or rejecting the move based on the evaluation

~~The method of Claim 13~~ wherein the predetermined criteria is the classification of the problem.

Claims 17-19 (Cancelled).